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IMAGES IN CARDIOLOGY

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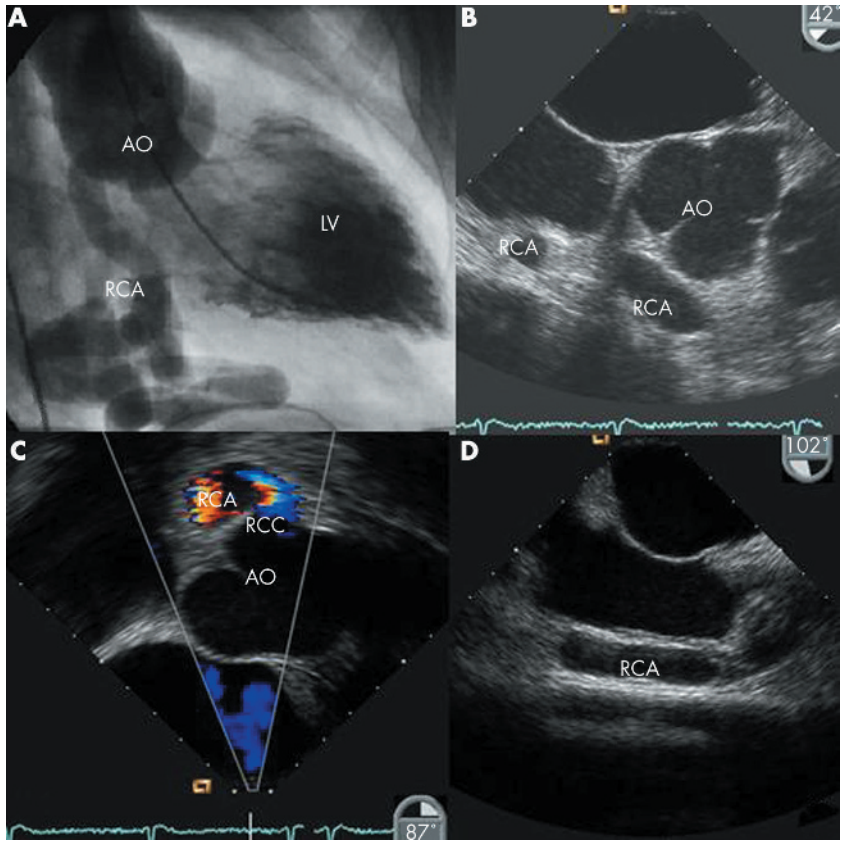
Angina from a right coronary artery to right atrial fistula

A 63 year old man with prior history of a motor vehicle accident and ensuing C5 quadriplegia presented with a diarrhoeal illness and dehydration. His other medical history was significant for paroxysmal atrial fibrillation, mild asthma, Addison's disease, and recurrent urinary tract infections. Prior echocardiography had demonstrated normal left ventricular function with a secundum atrial septal defect. During hospitalisation, he complained of frequent bouts of ischaemic chest pain. Electrocardiography revealed a right bundle branch block and ST segment depression in the inferior leads with pain. Despite antiischaemic treatment, his symptoms persisted and a coronary angiogram was performed. The left coronary system was angiographically normal. The dominant right coronary artery arose from the right coronary cusp and gave way to a highly tortuous and aneurysmal vessel that was well demonstrated during left ventriculography (panel A). A follow up transoesophageal echocardiogram confirmed the aneurysmal right coronary artery measuring 15 mm in diameter, with a fistulous communication into the right atrium (panels B–D). Left to right shunt was demonstrated from the right coronary artery into the right atrium but no atrial septal defect. He has thus far remained stable with only mild angina on effort and collaborative consideration is being given to how his anatomical anomaly would best be managed if symptoms were to intensify.



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